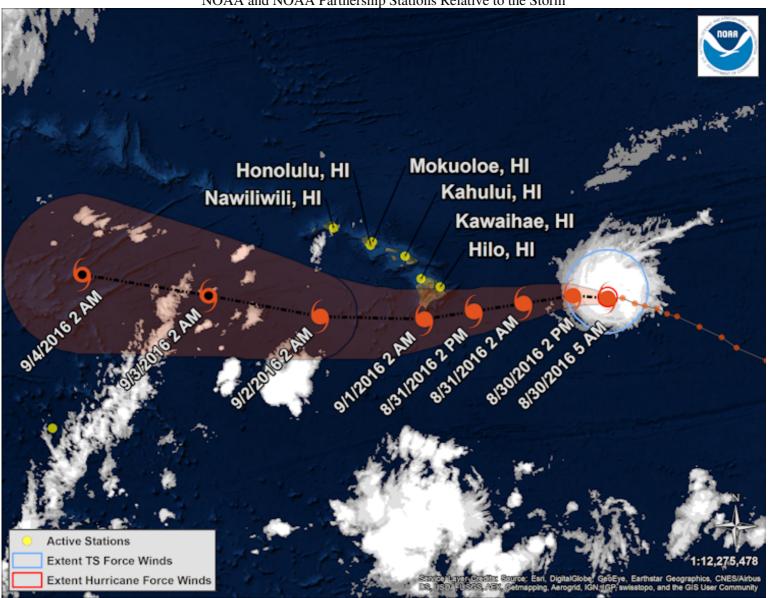




Hurricane MADELINE QuickLook Posted: 06:00 HST 08/30/2016

NOAA and NOAA Partnership Stations Relative to the Storm



#### Storm Analysis

As of 8/30/2016 06:00 HST, water levels across the Hawaiian Islands are slightly elevated and range between 0.2 and 0.8 feet above normal tide levels. Winds are generally 10 knots or less with slightly higher gusts. Barometric pressure has not yet begun to fall across the area.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst: PFF

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SELECT <u>CENTRAL PACIFIC HURRICANE CENTER</u>ADVISORY INFORMATION:HURRICANE MADELINE ADVISORY NUMBER 16
NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI
500 AM HST TUE AUG 30 2016

...MAJOR HURRICANE MADELINE TRACKING WESTWARD TOWARDS THE HAWAIIAN ISLANDS...

#### SUMMARY OF 500 AM HST...1500 UTC...INFORMATION

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LOCATION...19.3N 148.3W
ABOUT 445 MI...715 KM E OF HILO HAWAII
ABOUT 635 MI...1025 KM E OF HONOLULU HAWAII
MAXIMUM SUSTAINED WINDS...120 MPH...195 KM/H
PRESENT MOVEMENT...W OR 280 DEGREES AT 10 MPH...17 KM/H
MINIMUM CENTRAL PRESSURE...958 MB...28.29 INCHES

#### WATCHES AND WARNINGS

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#### CHANGES WITH THIS ADVISORY:

A Tropical Storm Warning is now in effect for

\* Hawaii County

A Tropical Storm Watch is now in effect for

\* Maui County including the islands of Maui Molokai and Lanai

#### SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for

\* Hawaii County

A Tropical Storm Watch is in effect for

\* Maui County including the islands of Maui Molokai and Lanai

A Hurricane Watch is in effect for...

\* Hawaii County.

A Tropical Storm Warning means that tropical storm conditions are expected within the warning area. A Tropical Storm Warning is typically issued 36 hours before the anticipated first occurrance of tropical storm force winds.

A Tropical Storm Watch means that tropical storm conditions are possible within the watch area. A Tropical Storm Watch is typically issued 48 hours before the possible first occurrance of tropical storm force winds.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A Hurricane Watch is typically issued 48 hours before the anticipated first occurrence of tropical storm force winds, conditions that make outside preparations difficult or dangerous.

Interests elsewhere in the main Hawaiian Islands should monitor the progress of Madeline.

#### **DISCUSSION AND 48-HOUR OUTLOOK**

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At 500 AM HST (1500 UTC), the center of Hurricane Madeline was located near latitude 19.3 North, longitude 148.3 West. Madeline is\ moving toward the west near 10 mph (17 km/h) and this motion is expected to become west southwesterly later today through early Thursday. On the forecast track, the center of Madeline will pass dangerously close to the Big Island Wednesday and Wednesday night.

Maximum sustained winds are near 120 mph (195 km/h) with higher gusts. Madeline is a category 3 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some weakening is forecast through early Thursday.

Hurricane-force winds extend outward up to 30 miles (45 km) from the center and tropical-storm-force winds extend outward up to 125 miles (205 km).

The estimated minimum central pressure is 958 mb (28.29 inches).

#### HAZARDS AFFECTING LAND

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WIND: Tropical storm conditions are expected and hurricane conditions are possible over Hawaii County on Wednesday. Tropical storm conditions are possible over Maui County, including the islands of Maui Molokai and Lanai, on Wednesday.

SURF: Swells generated by Madeline are expected to reach the Hawaiian Islands over the next couple of days, possibly becoming damaging along some coastlines Wednesday and Thursday.

RAIN: Heavy rains associated with Madeline may reach Hawaii County on Wednesday, and may impact other Hawaiian Islands later Wednesday into Friday. Madeline is expected to produce total rain accumulations of 5 to 10 inches, with isolated maximum amounts near 15 inches, across the Big Island, especially over windward portions. This rainfall may lead to dangerous flash floods and mudslides. Madeline may produce up to 4 inches of rainfall across Maui County.

#### **NEXT ADVISORY**

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Next intermediate advisory at 800 AM HST.

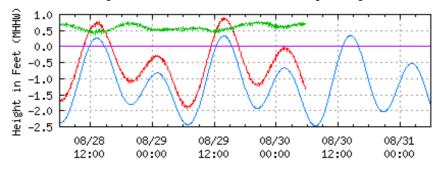
Next complete advisory at 1100 AM HST.

Forecaster Powell

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: <u>Hilo, Hilo Bay, Kuhio Bay - Water Level, Hilo, Hilo Bay, Kuhio Bay - Winds, Hilo, Hilo Bay, Kuhio Bay - Barometric, Kawaihae - Water Level, Kawaihae - Winds, Kawaihae - Barometric, Kahului, Kahului Harbor - Water Level, Kahului, Kahului Harbor - Barometric, Mokuoloe - Water Level, Mokuoloe - Winds, Mokuoloe - Barometric, Honolulu - Water Level, Honolulu - Winds, Honolulu - Barometric, Nawiliwili - Water Level, Nawiliwili - Water Level, Nawiliwili - Barometric</u>

#### NOAA/NOS/CO-OPS <u>1617760 Hilo, Hilo Bay, Kuhio Bay, HI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

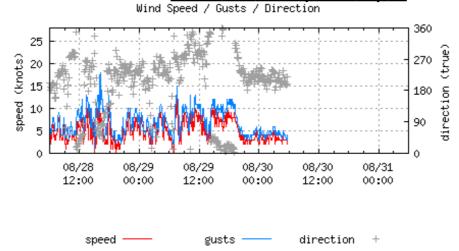


Predicted Tide (Obs-Pred) (Obs-Pred) MHHW

Last Observed Sample: 08/30/2016 05:42 (HST). Data relative to MHHW Observed: -1.31 ft. Predicted: -2.02 ft. Residual: 0.71 ft. Historical Maximum Water Level: Jan 20 1981, 1.37 ft.

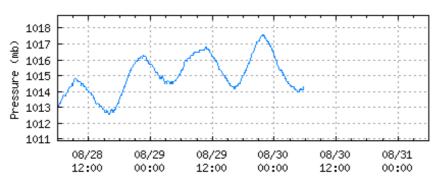
Next High Tide: 08/30/2016 14:25 (HST), 0.35 ft.

### NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI



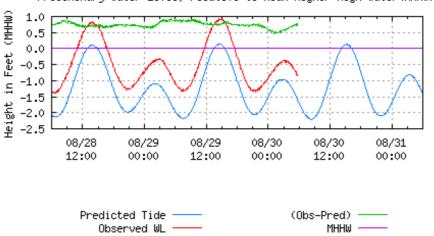
Last Observed Sample: 08/30/2016 05:42 (HST) Wind Speed: 2 knots Gusts: 3 knots Direction: 220° T

#### NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI Barometric Pressure

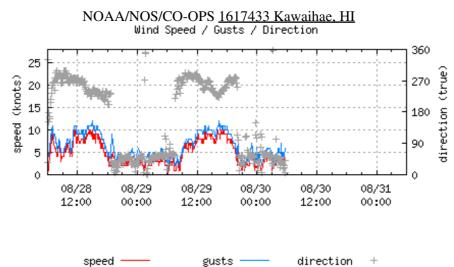


barometric pressure ——
Last Observed Sample: 08/30/2016 05:42 (HST)
Barometric Pressure: 1014.3 mb

# NOAA/NOS/CO-OPS 1617433 Kawaihae, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW)

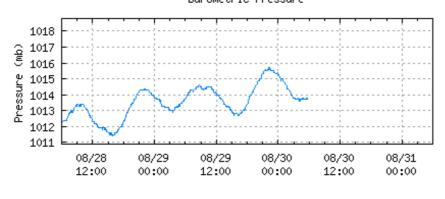


Last Observed Sample: 08/30/2016 05:42 (HST). Data relative to MHHW Observed: -0.83 ft. Predicted: -1.60 ft. Residual: 0.77 ft. Historical Maximum Water Level: Dec 13 2008, 1.22 ft. Next High Tide: 08/30/2016 15:12 (HST), 0.13 ft.



Last Observed Sample: 08/30/2016 05:42 (HST) Wind Speed: 3 knots Gusts: 6 knots Direction: 7° T

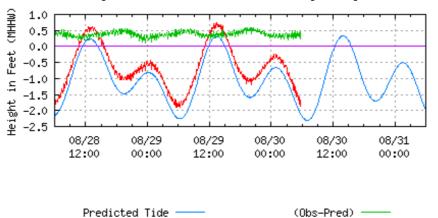
#### NOAA/NOS/CO-OPS <u>1617433 Kawaihae, HI</u> Barometric Pressure



barometric pressure ----

Last Observed Sample: 08/30/2016 05:42 (HST)
Barometric Pressure: 1013.7 mb

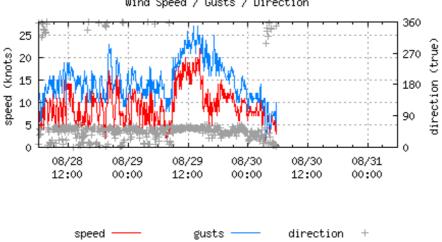
# NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Observed WL — MHHW — Last Observed Sample: 08/30/2016 05:42 (HST). Data relative to MHHW

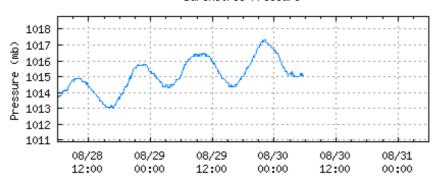
Observed: -1.66 ft. Predicted: -2.11 ft. Residual: 0.45 ft. Historical Maximum Water Level: Dec 20 1968, 1.23 ft. Next High Tide: 08/30/2016 13:55 (HST), 0.33 ft.

#### NOAA/NOS/CO-OPS <u>1615680 Kahului, Kahului Harbor, HI</u> Wind Speed / Gusts / Direction



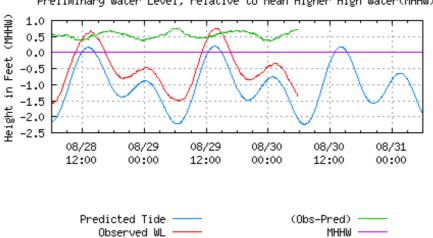
Last Observed Sample: 08/30/2016 05:42 (HST) Wind Speed: 5 knots Gusts: 10 knots Direction: 348° T

# NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Barometric Pressure

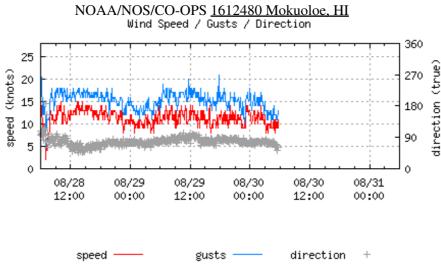


barometric pressure ——
Last Observed Sample: 08/30/2016 05:42 (HST)
Barometric Pressure: 1015.1 mb

# NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW)



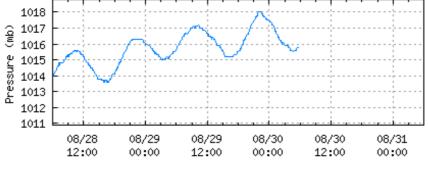
Last Observed Sample: 08/30/2016 05:42 (HST). Data relative to MHHW Observed: -1.34 ft. Predicted: -2.05 ft. Residual: 0.71 ft. Historical Maximum Water Level: Jan 8 1974, 1.46 ft. Next High Tide: 08/30/2016 14:06 (HST), 0.18 ft.



Last Observed Sample: 08/30/2016 05:42 (HST) Wind Speed: 9 knots Gusts: 12 knots Direction: 60° T

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

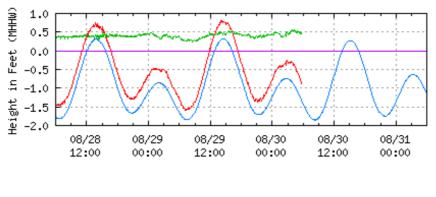
# Barometric Pressure



barometric pressure

Last Observed Sample: 08/30/2016 05:42 (HST) Barometric Pressure: 1015.8 mb

# NOAA/NOS/CO-OPS <u>1612340 Honolulu, HI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



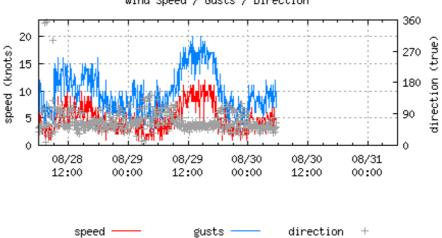
Predicted Tide

Observed WL — MHHW ——
Last Observed Sample: 08/30/2016 05:42 (HST). Data relative to MHHW
Observed: -0.88 ft. Predicted: -1.33 ft. Residual: 0.45 ft.

(Obs-Pred)

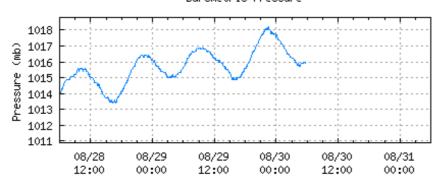
Historical Maximum Water Level: Feb 14 1967, 1.49 ft. Next High Tide: 08/30/2016 15:10 (HST), 0.28 ft.

#### NOAA/NOS/CO-OPS <u>1612340 Honolulu, HI</u> Wind Speed / Gusts / Direction



Last Observed Sample: 08/30/2016 05:42 (HST) Wind Speed: 4 knots Gusts: 7 knots Direction: 63° T

#### NOAA/NOS/CO-OPS <u>1612340 Honolulu, HI</u> Barometric Pressure



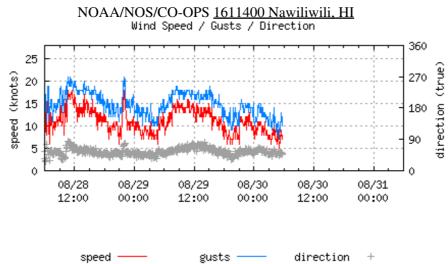
barometric pressure ——
Last Observed Sample: 08/30/2016 05:42 (HST)
Barometric Pressure: 1015.9 mb

# NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW) 1.0 0.5 0.0 -0.5 -1.0 -1.5 -2.0

Height in Feet (MHHW)

08/28 08/29 08/29 08/30 08/30 08/31 12:00 00:00 12:00 00:00 12:00 00:00 Predicted Tide (Obs-Pred) Observed WL MHHW

Last Observed Sample: 08/30/2016 05:48 (HST). Data relative to MHHW Observed: -1.26 ft. Predicted: -1.40 ft. Residual: 0.14 ft. Historical Maximum Water Level: Sep 11 1992, 3.15 ft. Next High Tide: 08/30/2016 14:59 (HST), 0.23 ft.



Last Observed Sample: 08/30/2016 05:48 (HST) Wind Speed: 8 knots Gusts: 12 knots Direction: 48° T

#### NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI Barometric Pressure 1018 1017 Pressure (mb) 1016 1015 1014 1013 1012 1011 08/28 08/29 08/29 08/30 08/30 08/31 12:00 00:00 12:00 00:00 12:00 00:00

Last Observed Sample: 08/30/2016 05:48 (HST)
Barometric Pressure: 1016.4 mb

barometric pressure

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
1617760	Hilo, Hilo Bay, Kuhio Bay, HI	08/30/2016 05:42 (HST)	-1.31 ft	-2.02 ft	0.71 ft	0.89 ft
1617433	Kawaihae, HI	08/30/2016 05:42 (HST)	-0.83 ft	-1.60 ft	0.77 ft	0.92 ft
1615680	Kahului, Kahului Harbor, HI	08/30/2016 05:42 (HST)	-1.66 ft	-2.11 ft	0.45 ft	0.76 ft
1612480	Mokuoloe, HI	08/30/2016 05:42 (HST)	-1.34 ft	-2.05 ft	0.71 ft	0.75 ft
1612340	Honolulu, HI	08/30/2016 05:42 (HST)	-0.88 ft	-1.33 ft	0.45 ft	0.80 ft
1611400	Nawiliwili, HI	08/30/2016 05:48 (HST)	-1.26 ft	-1.40 ft	0.14 ft	0.70 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce